UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,823	06/01/2001	Tadahiko Kubota	012777-041	8408

7590 08/01/2003

Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER
PERRY, ANTHONY T

ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/870,823	KUBOTA ET AL.	
	Examiner	Art Unit	
	Anthony T Perry	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 April 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 recites the limitation "the random mesh pattern" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the random mesh shape" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the random mesh shape" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claims 7 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by pixel area. It can not be determined if the Applicant is referring to the area of the display that contains pixels or the area of a single pixel of the display.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 9-12, 15, and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshikawa et al. (JP 11-184384) or under 35 U.S.C. 102(e) by Yoshikawa et al. (US 6,150,754).

Note that he patents are from the same patent family. The US patent is used to cite the teachings for simplicity.

Regarding claim 1, the Yoshikawa reference teaches an electromagnetic wave shielding film, having a transparent support and a conductive layer composed of a metal thin film (col. 23, lines 43-50). The conductive layer is composed of a mesh film in which random portions are formed (see Fig. 2).

Regarding claim 2, the shape of the random mesh portions formed in the conductive layer is formed by intersecting points (see Fig. 2).

Note that the Examiner has interpreted the recitation "obtainable by shifting lattice lines of a regular lattice pattern from the original position thereof" to be optional. Furthermore, the Examiner notes that if the recitation were not optional that it would be drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

Regarding claim 3, the intersecting points of the lattice lines of the random mesh portions of Fig. 2 are within an area defined by linking middle points between an individual intersecting point and each adjacent point thereof of a regular lattice pattern.

The Examiner notes that the claim limitation that "the mesh film formed by the metal thin film is formed by etching according to a photolithography method" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113). Therefore, it is the position of the examiner that it would have been obvious to one of ordinary skill in the art that the mesh film disclosed by Yoshikawa is at least a fully functional equivalent to the Applicant's claimed invention as evidenced by Yoshikawa's suggestion of all of the Applicant's claimed structural limitations.

Regarding claims 5-6, Yoshikawa teaches that the lines that form the random mesh portions each have a width of 200 microns or less which encompasses the range of 15 microns or less as well as the range of 0.1 microns to 10 microns (col. 23, lines 43-50).

Regarding claim 9, Yoshikawa teaches that the electromagnetic wave shielding film may include an infrared-ray cutting layer containing a dye (col. 14, lines 29-35). The functional language that the dye absorbs light in an infrared-ray range has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 U.S.C. § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language.

Regarding claim 10, Yoshikawa teaches that the electromagnetic wave shielding film may include a layer including a coloring agent such as a dye whose inclusion would inherently make the layer a visible-light layer.

Regarding claim 11, the Yoshikawa reference teaches a method of producing an electromagnetic wave shielding film, having a transparent support and a conductive layer composed of a metal thin film (col. 23, lines 43-50). The conductive layer is formed by using a mesh film in which random portions are formed (see Fig. 2).

Regarding claim 12, the shape of the random mesh portions formed in the conductive layer is formed by intersecting points (see Fig. 2).

Note that the recitation "obtainable by shifting lattice lines of a regular lattice pattern from the original position thereof" is not positively recited so it has been interpreted to be optional.

Regarding claim 15 and 18, Yoshikawa reference teaches an electromagnetic wave shielding film, having a transparent support and a conductive layer composed of a metal thin film (col. 23, lines 43-50). The conductive layer is composed of a mesh film in which random portions are formed (see Fig. 2). The electromagnetic wave shielding film is attached to the front surface of a plasma display device (col. 5, line 64 – col. 6, line 7).

Regarding claim 17, Yoshikawa teaches that the electromagnetic wave shielding film may include an infrared-ray cutting layer containing a dye (col. 14, lines 29-35). The functional language that the dye absorbs light in an infrared-ray range has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 U.S.C. §

112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language.

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi (JP 11266095).

Regarding claim 1 and 8, the Takeuchi reference teaches an electromagnetic wave shielding film having a transparent substrate and a conductive layer composed of a metal thin film, wherein the conductive layer is composed of a mesh film in which random portions are formed. The surface of the electromagnetic wave shielding includes a blackening layer (see abstract).

Claims 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshikawa et al. (JP 11-074684) or under 35 U.S.C. 102(e) by Yoshikawa et al. (US 6,090,473).

Note that the patents are from the same patent family. The US patent is used to cite the teachings for simplicity.

Regarding claim 11 and 13, the Yoshikawa reference teaches a method of producing an electromagnetic wave shielding film, having a transparent support and a conductive layer composed of a metal thin film (col. 3, lines 3-20). The conductive layer is formed by using a mesh film in which random portions are formed (col. 13, lines 16-19). The Yoshikawa reference teaches forming the mesh film by electroless plating (col. 14, lines 41-44).

Claims 11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto et al. (JP 2000-114770) or under 35 U.S.C. 102(e) by Goto et al. (US 6,210,787).

Note that the patents are from the same patent family. The US patent is used to cite the teachings for simplicity.

Regarding claims 11 and 14, the Goto reference teaches a method of producing an electromagnetic wave shielding film, having a transparent support and a conductive layer composed of a metal thin film. The conductive layer is formed by using a mesh film in which random portions are formed (see abstract). The Goto reference teaches forming the mesh film pattern by etching according to a photolithography method (col. 4, lines 53-55).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Nagasaki (JP 11-121974).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Anthony Perry* whose telephone number is (703) 305-1799. The examiner can normally be reached between the hours of 9:00AM to 5:30PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for this Group is (703) 308-7382.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[Anthony.perry@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly

set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Anthony Perry
Patent Examiner
Art Unit 2879
July 28, 2003

ASHOK PATEL
PRIMARY EXAMINER